

September

1951

# American **FRUIT GROWER**



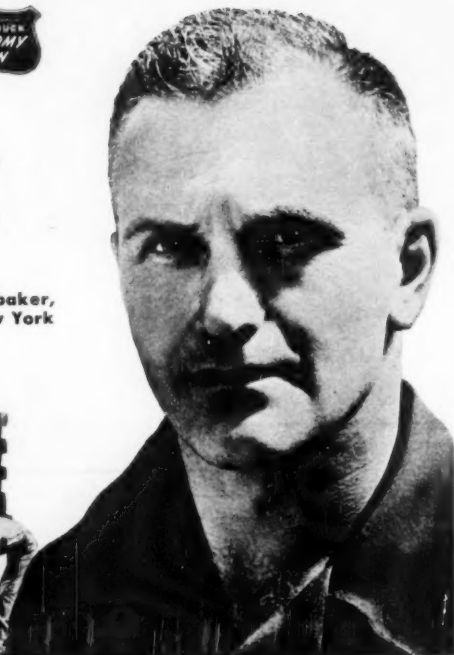
Adventures in Processing

NEW YORK  
Report No. 4566



# "I haul over 1400 gallons of cider for under 3¢ a mile!"

—says Wesley Orbaker,  
Williamson, New York



"You can't beat a Ford Truck for gas, oil and repair economy," says Mr. Orbaker.

Cidermill operator Wesley Orbaker uses 4 Ford Trucks to haul cider, vinegar and juices. Recently he entered one heavy-duty 1950 Ford F-6 equipped with POWER PILOT, in Ford's nationwide Economy Run. He reports:

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Like others who rely on Ford for low running costs, Mr. Orbaker is sold on the money-saving service he got from his Ford Dealer. For more facts on the trucks that last longer and save you money every mile—mail attached coupon.

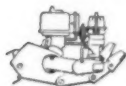


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*Caterpillar Tractor Co., Peoria, Illinois*



▲ Owner of this D4 shown cutting down a bank of trees for a citrus grove, is Tony Amori, San Jose, Calif. He says, "I've owned other makes of track-type tractors and this is the best and most economical tractor I've ever had; and the best dozer I've ever used!" He uses the D4 to doze out trees, spray, cultivate and handle other tillage work.

◆ This "Caterpillar" D2 Tractor equipped with a brush rake is shown clearing brush from the Crane Orchards, west of Fennville, Mich. This is the second D2 for the Crane Orchards, the first turned in an economical 9000 hours of service.

# CATERPILLAR

REG. U. S. PAT. OFF.

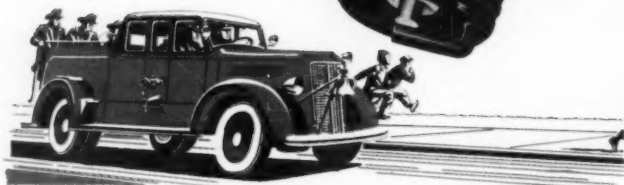
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4

SEPTEMBER 1951  
VOL. 71 No. 9

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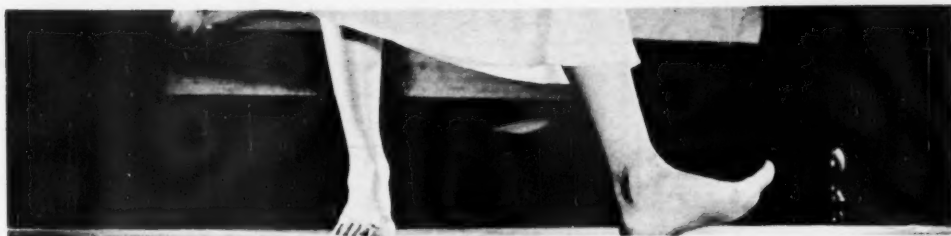
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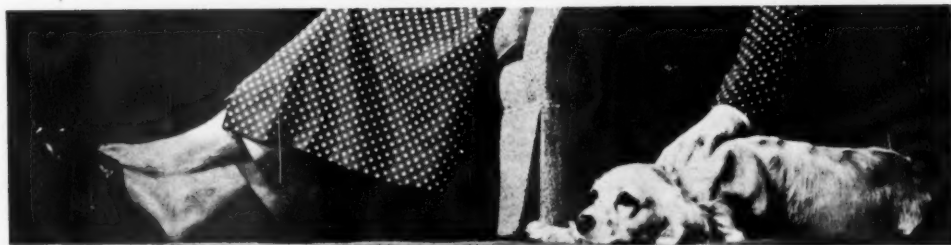
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*( A PERFECTION HEATER KEEPS FLOORS COMFORTABLY WARM ! )*



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*Specialists in GAS and OIL Heating*

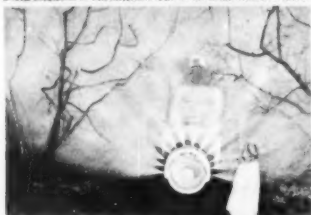


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*Measure up to*  
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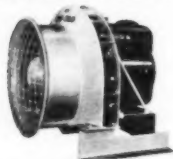
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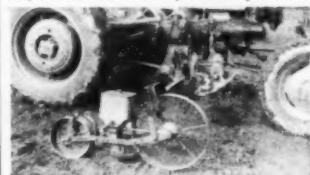
## LETTERS TO THE EDITOR

### A Garden Seeder For Baiting Mice

Gentlemen:

In regard to the Handy Andy about the seeder for applying mouse bait, which appeared in a recent issue, I would like to know the name and address of the manufacturer. What does the manufacturer call this unit? What bait is used and where do you get it? Who manufactures it?

West Frankfort, Ill. F. T.  
Charles E. Ostrander, author of the  
Handy Andy in question, makes the following  
reply: "This is an ordinary Planet Jr.  
garden seeder, manufactured by S. L. Allen  
& Co., Inc., 5th & Glenwood Ave., Phila-  
delphia 40, Pa. It was fastened by the use



of a piece of metal to the bar of the mowing  
machine attachment on the tractor. This  
was put on the mowing machine attachment  
so that it could be lifted when crossing the  
road, ditches, etc., as we do not want to  
throw poison bait out into open places  
where birds might get it.

"The material used in this is a cracked  
corn which is treated with methyl green and  
zinc phosphide. This material was pre-  
mixed by the Barker Chemical Co., Web-  
ster, N.Y."—Ed.

### Question Box

Dear Editor:

I notice you have inaugurated a Question  
Box column in the *AMERICAN FRUIT GROWER*  
magazine. This is certainly a step in the  
right direction, for to me it pinpoints the  
growers' problems.

Blacksburg, Va. Fred R. Dreiling

### Artificial Drinks

Dear Sir:

On the Editorial page of your June issue,  
I note your "Artificial Soft Drinks Vs. Nat-  
ural Fruit Juices." I value highly the arti-  
cle and would like some information chiefly  
as to the content of the soft drinks.

Pinellas Park, Fla. D. I. Roush

It is difficult to ascertain the exact content  
of many of the soft drinks since in many  
cases the ingredients are listed but not the  
amounts. For instance, a bottle marked  
grape flavor is listed as containing water,  
grape juice, sugar, citric acid, artificial  
flavoring, and artificial coloring. Certainly  
there couldn't be much grape juice in such  
a beverage if it is necessary to artificially  
flavor and color it.

Considerable information on soft drinks  
was given at the recent hearings of the  
Special House Committee, investigating the  
use of chemicals in foods. A witness at the  
hearing, Professor Clive M. McCay of  
Cornell University, made sensational charges  
against the cola drinks. He pointed out that  
cola beverages soften teeth and deserve care-  
ful consideration not only in relation to our  
national problem of poor teeth but also in  
relation to numerous cases of gastric ulcers

and welfare of our children. These charges  
so startled the committee that one, a sur-  
geon, commented that he had sometimes  
prescribed soft drinks to patients. Professor  
McCay went on to say that several other  
acids are used in other carbonated beverages  
and these all deserve careful study since  
solutions even one-tenth as acid as the cola  
beverage are claimed to erode the enamel of  
the teeth.—Ed.

### Fruit Pest Handbook

Dear Editor:

Will reprints of the Fruit Pest Handbook  
series, perhaps in pamphlet form, be made  
available to readers? Your magazine is  
excellent.

Hatboro, Pa. A. F. DeLong

Yes, the Fruit Pest Handbook series will  
be available in pamphlet form to our read-  
ers when the series is finished.—Ed.

### Wanted: Front-Mounted Mower

Dear Sir:

I am interested in an attachment that  
could be mounted on the front of either a  
wheel (John Deere) tractor or a Caterpillar  
D-2. Thus far all the equipment advertised  
appears to be individually motored and  
would be a little bit inconvenient on my 300  
acres. I feel certain the same problem must  
have faced American growers and that com-  
mercial equipment must be available.

I would like to tell you that for apple  
growers in distant countries your journal is  
the finest source of information on new  
developments. Although we in South Africa  
try to keep very much up to date with all  
developments, and have a very efficient  
Agricultural Department with experimental  
stations and field officers, we still lag behind  
U. S. development by a number of years. I  
can truthfully say that many of my oper-  
ating practices and tips have been gleaned  
from the pages of your journal and they  
have been quite an innovation in this part  
of the world.

Cape Town, South Africa H. Glaser

We are glad to hear from our South  
African reader who asks a very pertinent  
question regarding mower equipment. There  
are front-mounted mowers for small garden-  
type tractors, and several manufacturers  
have been interested in such equipment for  
large tractors. With enough encouragement  
from growers, this type equipment would  
undoubtedly be manufactured. One grower  
has estimated that a front-mounted cutter  
bar would reduce mowing time more than 50  
per cent. What is needed is a mower hy-  
draulically controlled that can be shifted  
from a front to a side cutter.—Ed.

### Record Grapevine?

Dear Sir:

On my ranch on the Pedernales River, 40  
miles west of Austin, Texas, there is a wild  
productive grapevine, the diameter of which  
is nearly twelve inches. The vine itself is  
more than four hundred feet long, and the  
main part of it crosses a chasm or canyon  
at an elevation of fifty feet or more. This  
chasm is more than one hundred feet wide,  
and we will never know how the vine  
crossed it. We believe the vine itself may be  
the largest in Texas, if not in the United  
States. I have never seen or heard of a wild  
productive grapevine of this size and length.  
San Antonio, Texas Charles A. Wheatley



*Discover Velvet Velocity!*



*See how easy driving is!*



The Styleline De Luxe 2-Door Sedan  
(Continuation of standard equipment  
and trim illustrated is dependent on  
availability of material.)



*Take traffic in stride!*



*Cruise the highways!*

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You're about to take  
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in a smart new Powerglide\* Chevrolet.

You start the engine,  
slip the control lever to "Drive,"  
and your "work" is done!  
Just press the accelerator to go,  
press the brake pedal to stop!

There's no clutch pedal . . .  
nothing to do with your hands  
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In less time than it takes to tell,  
you're the complete master

of this thrilling new way to drive . . .  
this *velvet velocity* that provides  
a smooth, unbroken flow of power  
at all speed ranges.

For Powerglide is something special . . .  
special 105-h.p. engine,  
special EconoMiser rear axle  
and extra-special automatic transmission.

It's waiting for you at your dealer's, now!  
Chevrolet Division of General Motors,  
Detroit 2, Michigan

\*Combination of Powerglide automatic transmission and  
105-h.p. Valve-in-Head engine optional on De Luxe models  
at extra cost.

**MORE PEOPLE BUY CHEVROLETS THAN ANY OTHER CAR!**

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Saddle Label

Tie Top

Elastic Top

Header Top

**H**andling apples, potatoes, onions or other heavy fruit or produce? There's a PLIOFILM supermarket bag that's just right for you — a bag that's exactly suited to your packaging and shipping methods. Wrap up your packaging problem in one of the sturdy, moistureproof, fully transparent bags you see here. All are readily adaptable to bagging machinery. For information, write: Goodyear, Pliofilm Dept., Akron 16, Ohio.

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Tough and tear-resistant, PLIOFILM holds as much as 10 pounds without danger of breakage. Customers buy more.



Stands rough handling in transit. Less breakage



Moistureproof, seals in flavor and quality. Insures repeat sales.



Good things are better in

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3-way protection against air, moisture, liquids

PlioFilm, a rubber hydrochloride—T.M. The Goodyear Tire & Rubber Company, Akron, Ohio



# ORCHARDING

## *A Priceless Heritage*

By H. B. TUKEY

IN THESE DAYS of constant emergencies, drum beatings, flag wavings, radio commentators, and masses of detail it is good once in awhile to stand a long way off and get a full perspective. If the viewer is a fruit grower he will, perhaps unconsciously, look through the eyes of a fruit grower. And if he does, he will be interested in a recent book by Henry Bailey Stevens entitled, *The Recovery of Culture*, of which this little piece is largely a review.

It is an old saying in fruit circles that old men plant orchards and that young men cannot wait for an orchard to come into bearing. America is a young country. She thinks largely in terms of assembly lines, the new models, and the next pay envelope. But older cultures and older civilizations add art and philosophy and psychology and conscience and the spirit of man. This is the new Synoptic History of Toynbee, which tries to weave all the threads into a great pattern of richness and meaning.

And so, author Stevens has looked back into man's past and has observed some facts of special interest to fruit growers and plant lovers. He points out first that a tree is not merely a plant; it is a mighty engine deeply rooted in the earth and spreading up into the heavens and with which the development of man is entwined. Food-bearing trees have been in existence for 100 million years. Animals of the group to which man belongs have been here for 60 million years, man-like creatures for 30 million, and man for one million.

For 59 of those 60 million years, says Dr. Stevens, trees have been our home. He maintains that man until quite recently—perhaps eight to 10 thousand years ago—was a peaceful animal, living on the fruits of plants. He was not the treacherous carnivorous creature so often portrayed in stories and pictures of primitive man.

The ancient handax of man was not a weapon but a garden tool. Only in the cold northern regions of the earth where man had to fight for his living did he develop an ax to kill.

The killing handax of the north has met the gardening handax of the warm regions, and the former is making a mighty stir. Cain was the gardener; Abel the grazer. Animal carcasses from Abel's flocks produced more spectacular results than organic mulches from Cain's fields. Abel was murdered in Cain's rage, and the flocks won a great victory. Only recently has the orchardist again returned to mulching to find it highly effective and beneficial.

Folklore abounds with tales of trees. So does religion—the Bo tree of Buddha, the Tree of Wisdom, Lao-Tze and the plum tree, Apollo of the apple tree, and so on and on. Trees are instinctively associated with man. An apple tree is the age of a man. It is not uncommon the world over to plant a tree when a child is born. Culture centers of the world developed on land suited for horticultural crops—the Nile Valley, the sloping hills of the Middle East, the islands and peninsulas of the Mediterranean, the lakes of Switzerland, the Normandy Coast, the British Isles, Ceylon, Japan, the hills of Knossos, Mycenae, Athens, Rome, Jerusalem, and Tara, the high places of Canaan, and the holy hills of London. Then animal production and an excess animal population brought on overgrazing, erosion, and desert.

And so the author asks for a more vigorous championing of the plant, especially trees. He cites Thoreau, Tolstoy, Richard Wagner, Shelley, William Penn, Rolland, Voltaire, Swedenborg, Gandhi, George Bernard Shaw, Albert Schweitzer, and others. He says that we know instinctively what the ancients felt; that green

(Continued on page 26)



## ADVENTURES IN PROCESSING

By ELDON S. BANTA

**P**ROCESSING the fruits you grow right on your own farm is a commendable venture, provided you go at the business with a little "know-how." Your best guides usually are the successes and failures of those who have pioneered in the same business you are undertaking, plus the valuable information released by research laboratories and experiment stations.

Since you are considering processing a portion of your fruit crop it is a good idea to check up on a few basic points. First, is there a place or a need for the product you are contemplating making? In other words, before you start, survey your market and determine whether you are going to be able to sell your product to advantage. You have the greatest chance in the world of making a superior flavored product because you can pick the fruits at their prime state of ripeness and rush them right through the processing procedure to a high quality product.

A second point of consideration is to ask yourself if you really can do the job. Study the economics of the procedure to see if it really can be a profitable undertaking. Then take an inventory of your own abilities and technical knowledge of the processing game. If after this careful analysis you are still convinced that you can process the fruits you grow to advantage, start working out your methods.

That's about what Mr. and Mrs. Austin L. Coons and their son did a few years ago. Their 35-acre Lowell, Mich., orchard was producing some off-grade apples and commercial outlets did not pay enough

to cover expenses of handling them. Furthermore, they did not want to put poor quality fruit on the fresh fruit market. So the Coons went into action and started making applesauce.

Canning was not a new venture for Mrs. Coons, for she had done some cherry canning several years previous. She simply applied her knowledge to the making of applesauce and got her husband and son off to a good start. It wasn't an elaborate plant—simply a few pieces of equipment in a building adjoining the house. They put less than a thousand dollars into a hand peeler and slicer, sealer, cookers, and retort. It was largely a hand operation, but nevertheless a good beginning.

The Coons use No. 2 cans and last year put up 4,000 cans of sauce. Mrs. Coons says the best-flavored sauce is made when the cooking is done fast. It is the superior flavor of the Coons' "Home Style" brand of applesauce that has made a hit with so many people around Grand Rapids and Lansing.

This is the procedure the Coons follow: Northern Spy is used as the main variety and with it is blended Wagener, Grimes Golden, and Jonathan. All sizes are used. After washing, the apples are put through the hand peeler and slicer. The slices are then carefully checked by hand to remove remaining fragments of skin or decayed or brown areas. It takes good apples to make good

Processing apple slices at the John Coffey Orchard, Grand Rapids, Mich. Top, left—The slicing machine made by the F. B. Pease Co., Rochester, N.Y. Top, center—Slices are washed in a special solution. Above—Weighing 20-pound tins.

AMERICAN FRUIT GROWER

sauce. Slices are put in 20-quart kettles and cooked on gas burners for 25 minutes. Each batch will fill from 75 to 80 No. 2 cans.

After cooking, the apples are whipped quickly and easily with a device made by Mr. Coons. It consists of a beater inserted in an electric drill. After whipping, sugar is added at the rate of two and one-half

pounds to 12 pounds of apples. The sauce is now ready for the can and the electric sealer. From 75 to 80 cans are processed in the retort for five minutes, but under no pressure. From the retort the cans go into the cooling vat which Mr. Coons made by welding together lengthwise two halves of large metal drums.

While applesauce inspired the Coons' canning venture, they have added peaches, red raspberries, prunes, and sweet corn to their list. Last year they processed 3,000 cans of Golden Jubilee peaches, 1,000 cans of Cuthbert red raspberries, 800 of Stanley prunes, and 4,000 cans of Tendermost sweet corn.

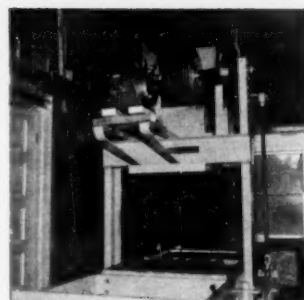
Thus far the Coons have canned all their products in No. 2 cans. Now they feel these are too large and are considering using the No. 303 can, which is about two-thirds the size of the No. 2 and holds just enough for two servings. The trend seems to be for consumers to buy just enough for one meal.

An attractive label identifies each can. The Coons feel that a good-looking label is really their No. 1 salesman on retail store shelves, and they invested several hundred dollars in the design of their brand label, "Orchard Home."

Home canned fruit products, the Coons discovered, must be merchandised because they are entering a stiff competitive market. One way the Coons "sell" a retailer is to have the store operator sample their fruits and compare them with others on his shelves. The superior flavor of the Coons' products always results in a trial order.

Over a period of four years the Coons have expanded their market outlets to five stores in Grand Rapids, five in Lansing, and four in Lowell, Michigan. The demand for Orchard Home canned fruits has grown from year to year and now the Coons must consider expanding their plant facilities.

A bushel of apples will make from 25 to 30 No. 2 cans of sauce. Last year Mr. Coons sold the sauce whole-



Cider press with six-bushel capacity.

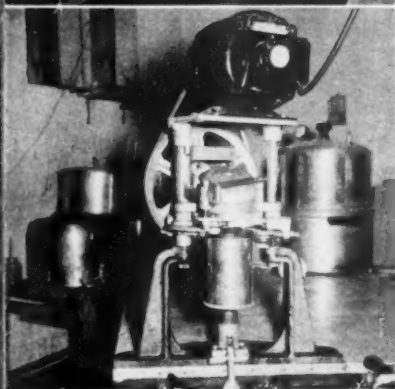
sale at \$4.50 per 24-can case. Canned peaches under the Orchard Home brand brought \$5.90 per case. About 28 cans of halved peaches can be made from a bushel of fresh fruit.

Another merchandising practice the Coons have begun to exploit is a Christmas gift package of canned fruit. A case of 12 cans which they sell for \$3.50 contains four cans of applesauce, three of peaches, three of corn, one of raspberries, and one of prunes. In 1950, their first year in the gift package field, they sold 100 cases.

Sodus Fruit Farm, Sodus, N. Y., under the management of Mark Buckman, processes a great portion of the fruit from their 735 acres of orchards. Last year 90,000 bushels of apples were sliced and prepared for freezing in this farm's modern apple processing plant. The apple slices in 30-pound tins are quick frozen in a nearby commercial freezing plant. Large bakeries, hotels, and restaurants are the outlets for Sodus frozen apple slices.

Sour cherries at the rate of 1,500 to 2,000 tons are pitted and prepared for freezing in the Sodus Fruit Farm's cherry plant. Four pitters can punch pits from about 800 tons of cherries a day. The ratio is four parts of cherries to one of sugar. Over a period of years the Sodus

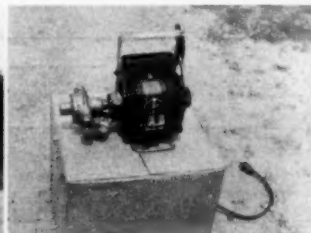
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Top—Adding maraschino brine to cherries at the Sodus Fruit Farm, Sodus, N.Y. Middle—Austin Coons' power sealer made by Dixie Canning Co., Athens, Ga. Bottom—Mrs. Coons sorts Cuthbert red raspberries. Best ones are canned.



Concrete block cider mill at Na-Ru-Bar Pump and motor for pumping cider to orchards of C. C. Taylor, Albion, Mich. strainer where pomace is removed.





## Washington Growers Joined Together

**F**OLLOWING considerable research and testing, the Washington apple industry is now prepared to go ahead with commercial production of frozen apple concentrate. On August 9, the Apple Juice Concentrate Committee recommended that frozen concentrate offers a practical means of utilizing a good portion of lower grade and small-sized Delicious and other varieties.

The story begins back in December, 1949, when the Washington State Horticultural Association unanimously resolved that new processing outlets for low-grade and small apples be explored in conjunction with the State Apple Commission. A committee was appointed including Darryl Ormiston, George D. Zahn, Otto Ross, R. H. Parsons, Herbert Frank, Francis Marley, and Reuben Benz chairman.

Deciding that frozen apple concentrate offered the most promising outlet, the committee solicited the technical and financial assistance of the Apple Commission, the Western Regional Research Laboratory and the Bureau of Agricultural Economics of the USDA, and the Washington Experiment Station.

After testing the preferences of 690 people in San Francisco, a juice was selected that was 50% Delicious, 20% Jonathan, 20% Winesap, and 10% Rome Beauty with a natural acidity of 0.4%. Most people preferred this blend although it was significant that persons under 21 years of age preferred a 100% Delicious juice at 0.2% acidity.

Following the preference test, a market test was made in Tyler, Texas

### A NEW HORIZON?

Frozen concentrated orange juice is credited as being the savior of the Florida citrus industry. Will frozen concentrated apple juice also stimulate the demand for apples? Here is told the disappointments and triumphs of two groups of growers who have staked considerable time and money in the firm belief that frozen apple concentrate will open a new horizon in apple marketing. The final story is still untold, but all apple growers will be vitally interested in this new development. —Ed.

and Modesto, California. Conducted by the research department of the Apple Commission, the tests revealed that the frozen apple concentrate sold at the rate of about 1/6 of frozen concentrate orange juice sales in Modesto and 1/15 in Tyler. The apple concentrate averaged 19% to 56% greater sales than did frozen grape juice concentrate and fared well also in comparison with regular single strength apple juice sales.

Most promising of all was the fact that in each town nearly seven out of 10 housewives who bought it made repeat purchases. An overwhelming majority of those who used the juice said they liked it unqualifiedly. Likewise there was little dissatisfaction with the price of 21 cents per can.

These promising results have paved the way for commercial production. Commercial facilities for concentrating and freezing the apple juice are not yet available but a planning date for the 1952 crop has been set for volume production. Estimates show that a new plant to produce the juice at a rate of three tons per hour would cost \$250,000. The return to the grow-

(Continued on page 23)

## From New England—Apple Concentrates, Inc.

**O**CTOBER Apple Nectar! That is the captivating brand name Apple Concentrates, Inc., a young organization headed by two prominent New England apple growers, is using to introduce frozen concentrated apple juice to New England consumers—a juice that has the flavor of a freshly picked apple on a crisp day in October.

The idea of a better tasting apple juice originated right in the vast orchards of Jonathan Davis and Nathan Chandler of Sterling Junction, Mass. "If the citrus people can produce and sell large volumes of frozen concentrated orange juice, why can't we do the same thing with apples?" said Chandler and Davis.

Samples of apple juice were furnished for experimented purposes to National Research Corporation of Cambridge, Mass., the organization that perfected the processing of frozen concentrated citrus juice and started the Minute Maid Corporation on its unprecedented spiral. The resulting frozen concentrated apple product looked sufficiently promising that National Research participated with a group of growers in forming Apple Concentrates, Inc., with Jonathan Davis as president, Nathan Chandler as treasurer, and Bryon Spence as general manager.

The next step was the establishment of a pilot plant in West Concord, Mass., to explore the possibilities of production and consumer acceptance. The first productions in the late spring of 1950 were along the line of a cider-type juice. After countless other experiments, Apple Concentrates started

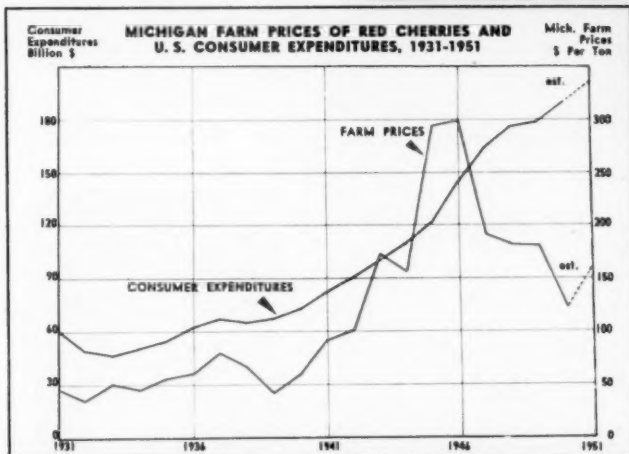
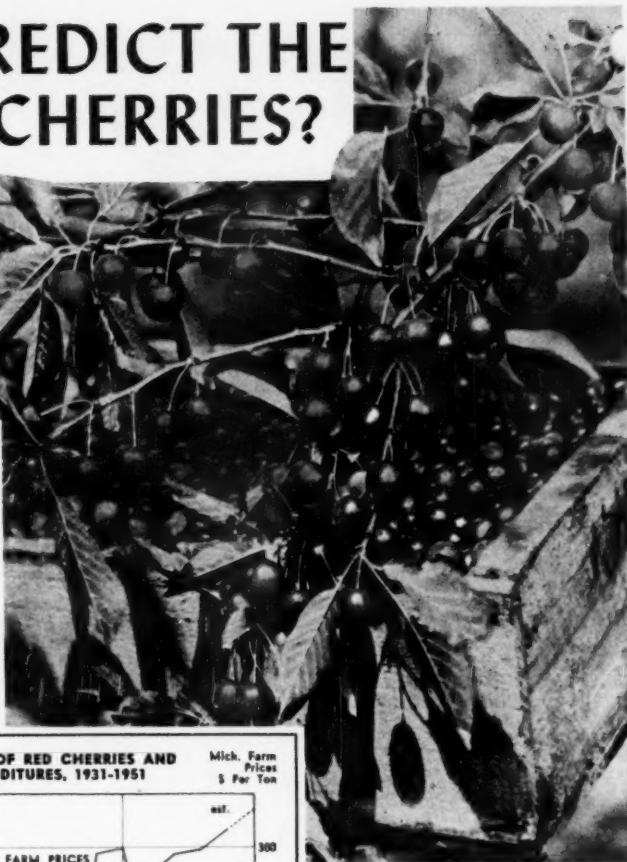
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# CAN WE PREDICT THE PRICE OF CHERRIES?

By L. L. BOGER  
Michigan State College

**W**HAT'S the price of cherries going to be? Thousands of Michigan red cherry growers and processors ask this same question each year. Each one has his own idea of what the price ought to be, but usually no one knows what it will be until the crop goes to market.

Even though one cent a pound may sound pretty small to most folks, it means a difference of about \$1,750,000 to Michigan cherry growers' incomes. A cent or more a pound is something to be concerned about! It's no wonder that growers and processors are searching for something that



Since 1931 there has been a close relationship between consumer spending and Michigan farm prices of red cherries. When consumers have a lot of money to spend, prices are high, but when consumer spending is low, prices are low. Big demand has tended to offset the price depressing effects of the large crops in recent years.

will help them arrive at satisfactory prices.

In 1948, the agricultural economics department at Michigan State College tackled the problem of what affects cherry prices. As yet they do not claim to have the answers to all of

the industry's price problems, but some interesting things have been uncovered as a result of their research. Before we look at some of their findings, however, let us examine the industry's pricing problems a little more thoroughly.

Like most fruit crops, red cherries are harvested and marketed from farms during a very short period of the year. Rarely does the marketing season extend beyond one month for all of the important commercial producing states in the eastern part of the country. This year, harvesting began about the last week of June in parts of Pennsylvania and was over by the last of July in Michigan.

Furthermore, the product is perishable. Perishable products must be preserved before they are stored. Growers cannot store the raw product in the hope that prices may be higher later in the year. What does this all add up to? It adds up to a lot of price uncertainty. As late as two weeks before the 1951 harvest, price "guesses" ranged from as low as last year's price (six cents) to as high as parity (11¼ cents). This spread represented over \$9 million in Michigan farm income.

The responsibility for finally setting a price rests primarily upon the pro-

(Continued on page 20)



## • Premium Prices Paid for Tree-Ripe Peaches • Fruit Breeding Horizon Includes Trees That Require No Pruning

**NEW YORK**—Over 600 growers from all areas of the state, Canada, Michigan, and Maryland obtained first-hand information last month on scab control with eradicanes, new concentrate sprays, rootstocks, new disease-resistant fruit varieties, and insect control on peaches at the New York Experiment Station, Geneva, which served as the setting for the summer meeting of the New York State Horticultural Society.

Growers were assured by Dr. Harold F. DeGraff of Cornell that further inflation this fall would not occur until more consumer goods are used up, and that the rapidly increasing population makes the long-term outlook good. Sam Dillon, who has the important job of supervising the 3,000 acres of rolling, picturesque Dillon orchards near Hancock, Md., urged expansion of markets for apples and peaches through intelligent and widespread promotion. His advice, too, was to cull trees and fruit heavily. Extensive local as well as national campaigns to move the apple crop were urged by James Clark of Milton and Cameron Garman of Burt, N. Y.—D. M. Daleymple, Sec'y., Lockport.

**LOUISIANA**—The small but growing Louisiana peach deal is unique in that it has helped set the pace in modern methods of peach packaging. The transition has been from the bushel tub to the Spartan box to the cell-type box to the consumer package of four and eight peaches per package.

The cell-type package allows the grower to deliver a more mature ripe peach to the consumer; therefore the "Tree-ripe" peach deal was born. At one time this year Louisiana "Tree-ripe" peaches were bringing 21 cents per pound delivered to market, or 20 cents at the grower's shed, while peaches from other areas were bringing \$3.50 per half bushel basket of 24 pounds net, or a price of 13 to 14 cents per pound delivered to the same market. At no time during the 1951 crop did the growers receive less than three cents per pound premium over peaches from other areas on the same market.—P. L. Hawthorne, Asso. Hort., Baton Rouge.

**TENNESSEE**—An appropriation of \$1,000,000 has been made to purchase a site and construct facilities for a farmers' market in Nashville. A 16-acre site with rail connections is under option and growers in this area are hopeful that an early start will be made. For the present the market will be restricted to Tennessee truckers.

Joe Peay, Goodlettsville, who spends most of his nights on the present Nashville market with a season-long array of fruits, tells us of a new wrinkle in peach marketing—for this area at least. Some enterprising grower from Alabama has been trucking peaches in tomato lugs—loose. The fruit is of excellent quality, at a maximum of maturity which could not possibly be packed and shipped under normal procedure. Consumer accept-

ance was excellent.

This merely confirms the opinions of most peach authorities that the main stumbling block to successful peach marketing lies in our failure to provide containers and transportation which will deliver PEACHES to the consumer instead of the turnip-like product now being offered to most consumers under the peach label.—A. N. Pratt, Sec'y., Nashville.

**PENNSYLVANIA**—Fruit crops of near bumper proportions are anticipated. Cherry production—12,900 tons compared with 11,000 last year—reached an all-time record. As a result cherry picking was prolonged well beyond the usual working period. In the orchards of the C. H. Musselman Company—large-scale fruit processors in Biglerville—pickers were paid 25 cents a bucket plus a bonus of five cents a bucket to those who work throughout the picking season. Earnings varied widely, depending upon the

skill of the picker, but often totaled \$15 a day.

**FLORIDA**—If all goes well, Florida will have another big citrus crop in the 1951-52 season. Florida produced her first 100 million-box crop in the 1950-51 season, and the condition of her trees and fruit in mid-August indicated that the 1951-52 crop would be larger by several million boxes.—Clyde Beale, Gainesville.

**VERMONT**—This has been a "growth" year for Vermont orchards—rainfall has been plentiful and the trees have been responding with luxuriant and extensive growth and fruit of excellent finish is developing. McIntosh harvest is not expected to get underway until the third week of September but growers should have no difficulty packing a U. S. Extra Fancy grade. The construction of a controlled atmosphere

(Continued on page 16)

## FRUIT PEST HANDBOOK

(SIXTH OF A SERIES)

### PEACH LEAF CURL

THE reddish, thickened, distorted leaves frequently seen on peach trees soon after the new foliage develops in the spring are the result of infections by the leaf curl fungus.

The specific name "*deformans*" given to the fungus is very apt as the infections result in marked deformity of the leaves, stems, and young shoots as they develop from the unfolding buds. Occasionally even the blossom petals are distorted, and not infrequently the fungus invades the fruit and causes reddish welts to develop on its surface.

The disease is definitely a springtime disease, appearing as the buds open and disappearing by early summer, only to reappear the following spring.

The development of the fungus is favored by cool, rainy weather and the disease is primarily of importance in the northern half of the United States. Only occasionally does it cause serious losses in the southeastern peach sections.

Aside from the infrequent loss caused by the direct infection of the fruit, the major damage from this disease and the one constantly facing northern peach growers is the untimely destruction of the leaves. In severe outbreaks when almost all the leaves are affected, the fungus can cause the loss

(Continued on page 21)



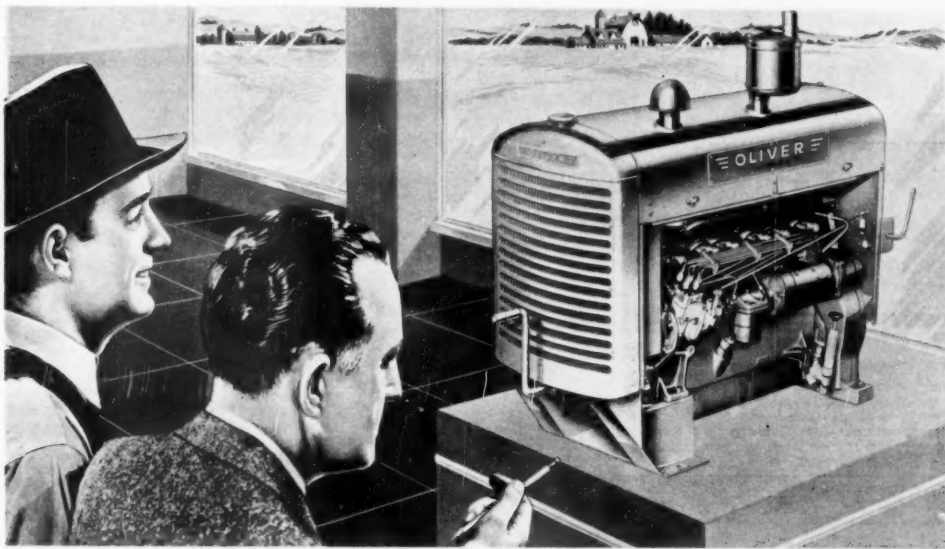
USDA

Almost 100 per cent of leaves are affected by peach leaf curl fungus.

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# IAA MEETING MAPS APPLE MARKETING PLANS

CONSIDERABLE anxiety over apple crop prospects was felt at the 57th convention of the International Apple Association held in New York last month. Another large crop was forecast at 127 million bushels which could vary seven million bushels either way depending on late-season growing conditions. However, there will be less apples per consumer than was the case 15 years ago.

The industry expects: A large crop in the East and a smaller than usual crop in the West. . . . Less apples to processors because of substantial canned apple carryovers. . . . A larger-than-usual supply of competing fruits. . . . A better chance to export apples. . . . National economic level to continue about the same.

Marketing recommendations: 1) Improved handling reduces bruising. Apples in good condition sell twice as fast as apples in poor condition. 2) Get to know the retailer and study his problems. Success in the food business depends upon the retailer. 3) Well begun is half done in marketing apples. Make an orderly plan in order to create an attitude of confidence. 4) Leave scabby, off-grade, hail-marked apples on the tree. 5) Don't speculate by holding apples for higher prices. Orderly marketing pays.

## STATE NEWS

(Continued from page 14)

storage by the Shoreham Co-operative Apple Producers' Association is of much interest to growers.—C. Lyman Calahan, Sec'y, Burlington.

**MARYLAND**—Growers have done an excellent job in pest control in peach and apple orchards. Peach yellows is creeping in and the word has gone out to chop the limbs off infected trees and allow them to dry before removing them from the orchard. The only trouble is that several trees are infected before the disease is noted.

G. S. L. Carpenter, retired divisional manager for the eastern United States and Canada of American Fruit Growers, Inc., died recently. Mr. Carpenter served ably as president of the Maryland State Horticultural Society in 1931-32.—A. F. Vierheller, Sec'y, College Park.

**OHIO**—Here is one instance where a chilly reception increased the popularity of a queen in the eyes of her followers. Growers attending the 29th annual Orchard Day at Wooster last month were given specimens of the Queen of Fruits after the peaches had been put through a cooling apparatus to reduce field temperature to about 40° F. Peaches thus cooled are ready for the storage room or refrigerated truck.

C. J. Birkeland, Illinois department of horticulture chairman, told growers of the breeding program being conducted to produce disease-resistant varieties and fruit trees which require no pruning. Illinois is one of four states co-operating in developing a scab-resistant apple variety. Now growing on the Illinois station grounds at Urbana is an apple tree that apparently has been regularly pruned according to recommended practices, yet no limbs or branches have ever been removed.

## WASHINGTON FRUIT LETTER

- Congress Passes Favorable Farm Appropriations Bills
- Mexican Workers Allowed to Enter U. S.

By LARSTON D. FARRAR

Washington Correspondent, American Fruit Grower

AS EXPECTED, final action on the appropriations bills by Senate and House of Representatives was as favorable to fruit growers as it possibly could be, in view of the economic facts of life.

Some \$1 billion was voted for farm programs, including ample funds for operations of the USDA, \$280 million in cash to make payments to some three million farmers who co-operate with the Soil Conservation Service, and ample funds for the various agricultural lending agencies.

There was not much tampering with such legislation as the "Section 32" program and the Agricultural Research Administration funds.

All in all, strictly from a personal viewpoint, no farmer can look to Congress and blame the average legislator for overlooking him in the military and foreign spending rush.

THE USDA has announced that it plans an export payment program designed to stimulate exports of apples and winter pears, also dried prunes and raisins. The program was developed under Section 32, Public Law 320, 74th Congress, as amended.

On fresh apples and pears, payments equaling 50 per cent of the export sales price, basis f.a.s. U.S. ports, but not more than \$1.25 per bushel or box, will be made to U. S. exporters who ship to eligible countries.

Prewar exports averaged approximately eight per cent of production for apples and almost 40 per cent for winter pears. Exports last year, even with the aid of the export payment program, were only two per cent of production for apples and five per cent of production for fall and winter pears.

THE Federal Trade Commission has approved a stipulation in which Stonewall Jackson Cormany, Jr., of Mount Vernon, Ill., has agreed to discontinue representing that Million Dollar Grape Concentrate, its flavor or color, are derived chiefly from the natural juice or fruit of the grape. The concentrate is sold to bottlers for making a beverage called "Million Dollar Grape." If this name or the word "Grape" is used, it must be accompanied by a clear and adequate notice that the concentrate and the beverage are imitation grape.

SOME progress toward relaxation of over-size and over-weight trucking laws for defense shipments—which is not likely to include fruits and vegetables, at least until further concessions are won—has been announced by Defense Transport Administrator James K. Knudson, who said that 47 state governments have agreed to a plan of the DPA for certification of defense shipments essential to military production. Similar arrangements have been in effect for some time between the Military Traffic Service of the Department of Defense and the various state authorities.

\*USDA has put into effect its new revisions of inspection fees and sampling rates for processed fruit and vegetables and their processed products. The revisions generally are concerned with increases in fees and changes in the number of samples required for inspection purposes. The USDA said the action was taken because the Congress only recently in the Agricultural Marketing Act requires "payment of such fees as will be reasonable (and) as nearly as may be to cover costs of the services rendered."

SECRETARY of Labor Maurice J. Tobin has announced that some 100,000 Mexican farm workers will come in between August 1 and October 15, under the new international agreement made possible by the recent migratory law passed by Congress. Reception centers will be established at or near Brownsville, Laredo, and El Paso, Texas; Nogales, Ariz.; and Calexico, Calif.

President Truman has requested of Congress a supplementary appropriation of \$6.5 million for the Immigration and Naturalization Service for operation of the new Mexican farm labor law and for enforcement machinery to halt illegal entry of "wetbacks"—i.e., those who swim across the Rio Grande or other rivers to get across the border.

U. S. employers will have to pay for transporting the workers from reception centers on the border to their places of employment and must see to it that certain minimum social welfare standards are maintained for the workers while they are employed in this country.

## THE QUESTION BOX

We would like to know in connection with irrigating strawberries and raspberries if there are any hazards involved in watering during the heat of the day or when the berries are ripening and are being picked. Is there any effect on the swelling of the fruit, cracking, and on quality and appearance?—*New York*

The experience of Arnold Ulrich who has irrigated since 1935 at the Ulrich Fruit Farm, Rochester, Minn., shows that timing of sprinkler applications is important. Since sprinkling raspberries in the daytime may blister the fruit, Ulrich does all watering at night. Ulrich says: "Experience has taught us that raspberries must not suffer from prolonged periods of drought. Application of water either by irrigation or natural rain when the plants are very much in need of moisture will cause the berries to grow so rapidly that the core will break and then the fruit will crumble in picking."

Regarding strawberries, Ulrich has found that the best time to irrigate is during the heat of the day. He writes: "It seems as if keeping the plants and fruit a little cooler during the heat of the day makes the fruit grow more rapidly and puts a beautiful sheen on it. Also, we have found more frequent applications of a small amount of water better than fewer applications of larger amounts."

Do you have figures that would indicate an average yield for apples over a period of about four or five years for a mature orchard?—*Pennsylvania*

Apple yields vary depending on the variety and the section of the country where they are grown. In the Pacific Northwest, yields as high as 1,500 bushels per acre are obtained. In orchards on unfertile soil, yields may not exceed 100 bushels per acre. The national average for apples is 250 bushels per acre. In your area apple trees must yield in the neighborhood of 500 bushels per acre to be profitable.

Fire blight has ravaged my Jonathan apples for the past four years. Thousands of dead twigs are in each tree and it is an impossible task to cut these out. Withholding nitrogen fertilizers, omitting pruning, and in-bloom sprays of weak Bordeaux have had no effect. Wet or dry seasons seem to have no influence nor too rich or poor a soil.

It is pertinent to recall that 20 years ago Arkansas Experiment Station specialists cautioned that it would be unwise to plant Jonathans south of the Missouri River, so great was the threat of fire blight.

The opinion that fire blight runs in cycles is merely a hope, is it not? Since my Jonathan trees are unproductive, should I destroy them?—*Missouri*

Important in the control of fire blight is pruning out diseased wood each year which, in your case, would be a costly, time-consuming process. It will be a continuous battle to keep your trees free from disease, and from an economic standpoint it would be wiser to remove the Jonathans and concentrate on less susceptible varieties.

Fire blight has no definite cycle but does fluctuate from year to year. Once it is established in an orchard it generally occurs every season, although it may be less severe some years than in other years.

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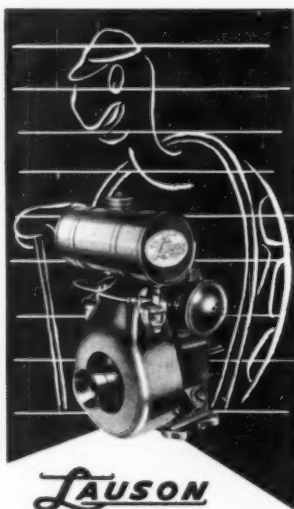
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## ADVENTURES IN PROCESSING

(Continued from page 11)

Fruit Farm has built up a good-sized market for their frozen cherries among bakeries, hotels, and restaurants. Often, frozen apples and cherries can be delivered to the same buyer at the same time.

Brining sweet cherries for use as maraschino cherries is another operation at Sodus Fruit Farm. Napoleon, Schmidt, and Windsor varieties are used. As they come from the orchard the cherries are weighed and then put in barrels at the rate of 250 pounds each. The brine, consisting of 46½ pounds of calcium carbonate and 66½ pounds of sulfur dioxide in 400 gallons of water, is then added to the barrel. It takes from 12 to 16 gallons to fill a barrel.

### Flavorful Apple Juice

Gareth O. Clark, Spencerport, N. Y., has built up a promising business in apple juice. Mr. Clark ventured into the apple juice game because, as he says, "I think it is one of the best ways to extend the apple market season." A portion of the crop from his 45-acre apple orchard now goes into pasteurized juice. Last year his production totaled about 4,000 gallons.

Varieties are important in making a flavorful juice. Clark likes a mixture of Baldwin, Northern Spy, and Tompkins King best, with some Golden Delicious, McIntosh, or Greenings added in small quantities. He watches the flavor of the juice very carefully and from time to time varies the quantities of each variety to achieve the highest flavor.

Cleanliness! That's Gareth Clark's watchword in juice making. He maintains you should spend as much time in cleaning your processing equipment as you do in using it. He washes his press cloths every day, using an old washing machine for the job. No soap is used because of the danger of leaving an off-flavor in the juice.

Clark's plant is not a streamlined model, but having been devised by a fruit grower, it is efficient. From the hydraulic press the fresh juice is pumped into an aluminum coil for pasteurizing. The 70-foot coil is inserted in a metal tank which Mr. Clark welded together to obtain the proper size. Water surrounds the coils and is heated with two emission-type gas jets.

The pasteurizing temperature is maintained between 175° and 180°. Low pressure is used, about 15 or 20 pounds, just sufficient to force the juice through the pasteurizing coils. About 60 gallons an hour can be pasteurized in this small plant.

Cooling of the juice immediately after pasteurization is important in maintaining good flavor. Clark bottles his juice in glass gallon jugs, consequently care must be taken in cooling. Glass will stand only about a 50-degree change in temperature without cracking. Mr. Clark solved this problem by making two cooling vats. The first vat cools the hot juice down about 50 degrees and the second another 50 degrees.

Most of Clark's juice is sold retail at the farm the year round, the balance wholesale to grocery stores. Last year he retailed his juice for 75 cents a gallon and a 15-cent deposit on the jug. With apples turning out three to four gallons per bushel, juice became a profitable outlet for the Clark apples.

We might add here a discovery made a few years ago by Dr. Carl S. Pederson, New York Agricultural Experiment Station processing specialist, which helps to keep the original flavors in the processed juice. It consists of spraying ascorbic acid solution (vitamin C) on the apples during or just after the milling process and before pressing. The ascorbic acid delays the oxidation of the juice. Even after pasteurizing and bottling, the juice remains light-colored and possesses more of the apple flavors.

C. C. Taylor and his orchard manager, H. T. Nelson, of Albion, Mich., have a different slant on their apple juice making. They like to make ordinary apple cider and sell the untreated amber juice at their farm market.

Like Clark in New York, these Michigan growers feel that cider is a



"He came along and sold us on the idea of no ladders—So we hired him!"

AMERICAN FRUIT GROWER

good outlet for small size but good apples. At Taylor's Ne-Ru-Bar Orchards the varieties blended are about as follows: one-half Jonathan, one-quarter Steele Red, and one-quarter Golden Delicious. Sometimes he replaces Jonathan with Northern Spy. The important thing is to keep astringent varieties dominant in the blend. Last year, their first season for apple cider, over 2,000 gallons were sold to customers in the orchard salesroom at 50 cents per gallon and a 10-cent deposit on the jug.

With a large apple crop in prospect at Ne-Ru-Bar Orchards, Mr. Taylor and Manager Nelson are planning for a big push on apple cider this fall. They are sure they can sell over 5,000 gallons with a little sales promotion in Albion, Jackson, Marshall, and Battle Creek.

Ne-Ru-Bar Orchards also specialize in selling frozen sour cherries in 30-pound tins and two-pound boxes. A commercial freezer does the freezing but the cherries are brought back to the farm and sold from a freezer held at zero in the salesroom. Several customers buy a 30-pound tin, then repack in small containers and put them in their food freezer at home. Last year they sold 12,000 pounds of frozen cherries.

#### Fresh Apple Slices

John R. Coffee, Grand Rapids, Mich., has found a year around outlet for his Northern Spy apples in the form of fresh apple slices to hotels, restaurants, and bakeries, mainly for pie baking. Four years ago he started in the business and last year he processed between 6,000 and 7,000 bushels of apples.

On Mondays and Thursdays he does the peeling and slicing and he delivers the processed apples on Tuesdays and Fridays. His customers are located in Grand Rapids, Muskegon, and Grand Haven. The customer orders on delivery day or telephones his order the day before regular delivery. In this way no apples are sliced ahead of the weekly demand. It takes about 140 bushels a week to supply Coffee's bakery trade.

Coffee is operating at present in a temporary plant. Last fall his original plant burned and his new 32x50-foot concrete block building is not yet completed. Ample equipment will be installed in the new processing plant to double his present output. Six women operate the plant now and the new one will require 10.

The procedure in the Coffee plant is about like this: A crate of apples is set alongside each peeling machine. One worker places apples on two machines which peel at the rate of 10 to 15 bushels per hour. From

the peelers the apples roll onto the trimming table where three women remove any remaining bits of skin and cut out brown or decayed areas. The apples are then fed into the slicer and seed culling machine and dropped into a sodium bisulfite bath which prevents browning. The solution is made up to 2,200 parts per million of sodium bisulfite. It is checked every two hours and more chemical added if the solution has become weak.

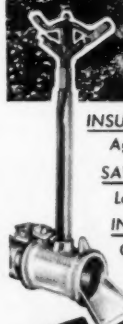
The slices are conveyed slowly through the bath and up under a small blower which dries off excess

moisture. The slices are then packed in 20-pound tin cans. Coffee packs his apples in used cans because he can obtain them at a low price, and he uses them over and over. To protect the apples each can is lined with heavy freezer-locker paper before filling. The slices also are covered with the paper.

Since Coffee peels, slices, and delivers apple slices every week of the year, cold storage facilities are essential.

These are but a few of many ways growers are planning an organized selling program. THE END

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## CAN WE PREDICT CHERRY PRICES

(Continued from page 13)

processors' shoulders. It must be a fair price to growers as well as for processors. If too high a price is paid, processors' margins are squeezed and the pack moves slowly. If the pack moves slowly, carryovers are likely to result. These would tend to hold next year's prices down.

If the price is too low, growers' incomes are reduced more than necessary and the pack moves fast. Processors could have gotten higher prices and the pack could have been marketed over a longer period.

The "right" price would allow processors a reasonable margin after storage costs have been met. In addition, the "right" price would move the pack out of processors' hands before next year's harvest season rolls around. The importance of setting this "right" price prompted the recent study of Michigan State College.

Prices in a free economy like ours are determined by a host of forces. Red cherry prices are no exception even though they may seem to be strictly a grower-processor problem. The quality of the crop, prices of competing fruits, marketing costs, advertising, spending by consumers, and the size of crop are only a few of the

many, many forces that affect red cherry prices.

When you try to consider all of these at once, the situation rapidly becomes complicated and confusing. This is especially true if you are trying to develop a formula for arriving at the "right" price. The detailed study of factors affecting prices was immediately limited to those found to be most important.

### Two Important Factors

Two factors stood out as being very important. These were: 1) the amount of money that people in the United States have to spend, and 2) the size of the crop in the important eastern states (Michigan, Wisconsin, New York, Ohio, and Pennsylvania). In fact, for the years since 1930, these two items alone accounted for 93 per cent of the year-to-year change in Michigan red cherry prices.

It was further found that in order for the farm price to increase one cent a pound either:

Production in the five eastern states had to decrease 18,500 tons, or

The amount of money that people in the United States spend had to increase \$13.4 billion.

The foregoing relationships illustrate the importance of demand in influencing Michigan red cherry prices. Actually, the formula yielded the same level for cherry prices in 1943 as it did for 1951—about eight and one-half cents a pound for growers and \$2.35 a dozen for No. 2 cans f.o.b. packing plant. But since 1943 we have witnessed more than a five-fold increase in production and a two-fold increase in consumer spending. In other words, a doubling of consumer spending power offset the increase of 115,000 tons in production. Demand simply cannot be ignored as an important factor affecting prices.

### Formula Pricing

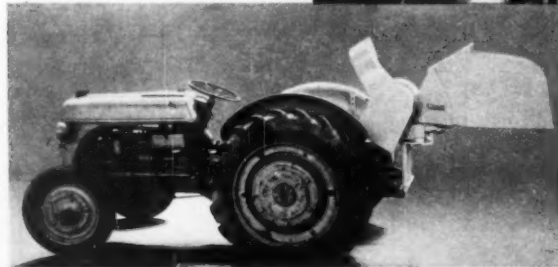
How did we arrive at this year's price of cherries so quickly? First of all, we have already mentioned how a change in the factors affects prices. What remains is a consideration of how much change we have had in production and spending since last year. Here is last year's picture compared with this year's:

Year	Consumer Spending	5-State Production	Price Per Lb.
1950	180	151,000	\$0.06
1951 Estimates	205	142,000 (June 15)	\$0.085

As compared with last year, we see that consumer spending increased \$25 billion, which means that this adds 1.9 cents to last year's price. Production

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was 9,000 tons lower. This adds another one-half cent to the level of last year's price. The two factors together add almost two and one-half cents to the six cents obtained last year, so that this year's expected price was about eight and one-half cents a pound.

Formula pricing is not a new idea. Prices of milk in federal order markets are determined by formula, and formulas are used in connection with government support price programs. But there are limitations to any formula. In particular, the cherry formula includes only two factors. Many other forces operate continuously and affect prices. Then, too, relationships are constantly changing as consumers' wants change or as new uses are developed for the product. These limitations should be considered when the formula is applied.

#### A Guidepost to Planning

Appraising the general economic situation is also important. This is especially true for estimating the level of consumer demand that is likely to prevail while the crop is being sold. Then, too, the formula can be no better than the figures used in developing it. It is important that we have accurate figures on the size of the crop.

This cherry price formula, as it now stands, can best be used as a guidepost to production and marketing planning. It can be used to narrow the range of expected prices. When applied in this manner it can be the starting point to bargaining between growers and processors. It becomes a supplement to, and not a substitute for good judgment in the determination of prices for the Michigan red cherry industry. **THE END**

#### PEACH LEAF CURL

(Continued from page 14)

of the fruit crop, for the diseased leaves turn black and drop, leaving the fruit exposed and without sufficient leaf surface to insure proper growth.

**Control.** During part of its life cycle the fungus exists as a yeast-like form between the bud scales, but as soon as new growth of the tree begins the yeast-like cells germinate and penetrate into the developing leaf and shoot tissues. The fungus is readily controlled by sprays applied in the dormant period but once growth begins and the fungus has penetrated the young leaf tissues, spraying is of little avail and the disease must run its course for the season.

The only safe, sure, and tried procedure for leaf curl control is to make one thorough application of lime-sulfur, six and one-half gallons in 100 gallons of water, or of 6-6-100 Bordeaux mixture during the dormant period BEFORE the buds begin to swell.

In the northern half of the country no grower should omit this dormant spray. Because of its correlation with environmental conditions, the disease is erratic in its development from year to year, but it is a constant threat to a peach crop. To ignore this threat is to take needless risk of damage to the next year's crop.—John C. Dunagan, USDA.

SEPTEMBER, 1951



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## SOLVING THE SURPLUS PRUNE PROBLEM

New processes make possible a delicious new beverage from Italian and French prunes

By W. V. CRUESS and WILLIAM RIVERA

TWO distinct types of prunes are produced in the Pacific Coast states. California grows the French (Petite Prune d'Agen), Imperial, and Sugar varieties chiefly. All are of low acidity, high sugar content, and light to medium red in color before drying.

In Oregon and Washington the principal variety is the so-called Italian variety, which is also known as the Fellenberg and as the Oregon prune. It is large, deep red to blue-black in color, and tart-sweet in flavor, that is, it is of rather high acidity. In that respect it resembles a plum rather than a prune such as California grows.

During the past three seasons we have made fresh juice from California prunes and during the past two seasons from Oregon or Italian variety prunes. Previous attempts to make juice from ripe fresh prunes of the French variety resulted in our getting a puree instead of juice.

### Enzyme Does the Trick

A number of years ago studies were begun in our laboratory on the use of Pectinol, a pectic enzyme, in the clearing of wines and fruit juices. Three years ago we tried using it on fresh prunes previously finely ground or pureed. After treatment for several hours with the enzyme the pureed fruit pressed readily to give a high yield of juice that could be filtered with ease. We have bottled the fresh juice during the past three seasons and have submitted it to several hundred persons for tasting.

When made from the most important California prune, the French, the juice is light red to pale pink in color, sweet in taste, and of fresh prune (not dried prune) flavor. A good many samplers have thought it too low in acidity and too pale in color. The Imperial variety gave a similar juice. The Sugar variety gave a juice of deeper color than did the French; however, the Sugar is not grown extensively. The French variety tends to become overripe for use in making juice and thus much too high in sugar and too low in acidity.

In 1949 we conducted experiments with the Italian variety as raw material for fresh juice. The prunes

were steamed, cooked, pitted, and coarsely pureed. To the puree was added, and mixed in thoroughly, three grams of Pectinol-O enzyme preparation per 1,000 grams of puree. The puree was allowed to stand overnight at room temperature.

### Hy-Flo Simplifies Pressing

It was then mixed with about three per cent by weight of Hy-Flo and pressed in a rack and cloth apple juice press. Pressing was rapid and a good yield of juice was obtained. The Hy-Flo, a form of infusorial earth filter aid, greatly facilitates pressing.

The juice was filtered through a small pad-type filter and bottled, crown capped, and pasteurized in the bottles at 175° to 180° F. In commercial practice the juice could be flash pasteurized, bottled hot, sealed, and cooled, as is done with apple juice.

The Italian prune juice was deep purplish red in color. It has a rich fresh fruit favor and is tart in taste. The 1949 juice was 21° Brix and of 1.05 per cent total acid expressed as citric acid. The 1950 juice was 24° Brix and 1.15 per cent acid.

Most of those who have compared the Italian and the French fresh prune juices have preferred the Italian because of its much deeper color, higher acidity, and more fruity flavor. We believe the Italian fresh juice has exceptional commercial possibilities and we recommend it for pilot or small commercial scale trial by Oregon, Washington, or Idaho juice producers in order to test consumer opinion in a few typical markets.

### Concentrate Possibilities

It also makes an excellent concentrate that can be preserved by freezing as are fresh orange and other fresh fruit concentrates. The consumer would add water at time of serving to dilute it to original juice strength. The concentrate was prepared by concentrating the fresh juice under vacuum to a medium heavy syrup and diluting with fresh juice to impart flavor.

The juice may be canned in berry enamel cans, that is, in double enameled, cold rolled tin-plate cans. Prune juice is corrosive insofar as ordinary cans are concerned. It has retained its color and flavor very well in glass in our experiments.

THE END

Dr. W. V. Cruess, a pioneer in the big and growing field of fruit processing, and William Rivera are in the Food Technology Division of the University of California, Berkeley 4.

## FROM NEW ENGLAND

(Continued from page 12)

a limited production of Apple Nectar in the fall of the same year. But it was late November before commercial



President of grower-operated Apple Concentrates, Inc., is Jonathan Davis.

production of October Apple Nectar was started. Early in January, 1951, the product went onto the market.

The name Nectar was applied to the juice to distinguish it from "cider type" juices. The product is true apple juice, containing both the natural flavor and aroma of fresh apples.

Fruit destined for Apple Nectar is placed in cold storage to await processing. The actual operating period of the processing plant, from 100 to



Nathan Chandler, AC's treasurer, examines apples destined for Nectar.

120 days, depends on the condition of the apples.

In processing the fruit, the apples pass over inspection tables and only unbruised fruit is allowed to pass into the hydrochloric acid bath that removes any spray residue that may remain. The apples then go into a wash tank where cold water sprays

remove any traces of foreign matter.

As is true of all the equipment at Apple Concentrates, the milling and chopping machinery through which the fruit passes is made of stainless steel. The fruit is carefully pressed with the aid of nylon press cloths and a rotating screen. The six-ounce cans of concentrate are put through high vacuum equipment similar to the type used for freezing citrus juices. A six-ounce can of Apple Nectar, when diluted with water, makes one and one-half pints of juice.

To insure a flavorful juice, three and sometimes five varieties of apples are blended. The juice is not filtered and therefore contains the natural fruit solids. Vitamin C (ascorbic acid) is added to help preserve the flavor and delicate aroma of the ripe fruit and to give a light-colored juice.

The next big step of grower-operated Apple Concentrates will be promotion and expansion.—C. L. Stratton.

## FROM WASHINGTON

(Continued from page 12)

er should be approximately \$35 per ton based on a 70% yield of juice.

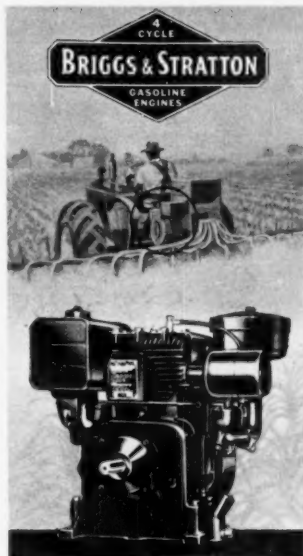
With flavor stripping, high vacuum concentration, and returning the flavor before freezing, the concentrate carries essentially all of the flavor and aroma of freshly pressed apple juice. When properly reconstituted, the fro-



Reuben G. Benz, a national figure in the fruit industry, is chairman of Washington state apple juice concentrate committee.

zen concentrate yields a juice which cannot be distinguished by taste from the original juice. Likewise, regular canned apple juice preserved by flash pasteurization is difficult to distinguish from freshly pressed juice, but the advantage of frozen concentrate is that it does not deteriorate in storage whereas canned juice held at 75° F. was found to gradually lose its flavor—in three months the loss was easily detected and in six months the natural flavor had disappeared.

The Washington state apple industry stands at the threshold of a new marketing venture.—Jack Whitnall.



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For the grower who wants to jumble pack his fruit, the Fort Wayne Jumble Pack carton is available and can be assembled without any equipment. The box is pictured below.



Many growers are using the Kys-Pak method of shipping their apples to market. Fort Wayne's One-Trip Type box (shown below) is ideally designed to accommodate the Kys-Pak fibre trays.



Fort Wayne master containers are available for various consumer-type packs. All Fort Wayne containers have been thoroughly tested in the orchard, at the storage, or at the retail outlet to assure the grower of maximum efficiency. If undecided about your packaging needs, write Fort Wayne Corrugated Paper Co., 130 East Douglas Ave., Fort Wayne 1, Ind.



**From where I sit ... by Joe Marsh**

**Easy Makes His "Cat"  
Tread Lightly**

Driving home on Three Ponds Road yesterday, I was flagged down by Easy Roberts' boy Skeeter. "Take it slow," he advised. "Dad's crossing this road with our tractor, just beyond the bend."

Around the curve I saw why Skeeter stopped me. Easy had laid two rows of old truck tires across the road, and was driving his new "Cat" tractor over them!

"More trouble this way," Easy explains, "but it does keep those tank tracks from tearing up the asphalt when I have to cross over to our other fields. After all, the

roads belong to all of us—and I guess I'd get mad if someone else chewed them up."

From where I sit, Easy is my kind of citizen. He doesn't just give democracy lip service. He honestly believes it's his duty to consider the other fellow's interests. Whether it's the right to use the public highways or the right to enjoy an occasional glass of beer, Easy's out to protect his neighbor's "right of way."

*Joe Marsh*

- APPLE PACKING
- SWEDEN JUICER

### Time and Cost Savers



Whether it is for processing or packing, the proper conveyors built for your particular operation can save money and turn borderline fruit harvest into profit. The Standard Conveyor Co. has just issued a

free bulletin, No. 63-A, for AMERICAN FRUIT GROWER readers which contains worthwhile material. We suggest that you write Standard Conveyor Co., North St. Paul 9, Minn.

### New Booklet

Designed and written to take the guesswork out of selecting and using corrugated and solid fibre shipping cases, an informative eight-page bulletin has been issued by Paisley Products, Inc. Included in the profusely illustrated file size booklet are the advantages, applications, composition, forms, properties, and sealing techniques of Paisley case sealing adhesives for hand or machine sealing operations. Copies of Technical Service Bulletin No. 22 may be obtained, without obligation, by addressing requests to Paisley Products, Inc., 1770 Canalport Ave., Chicago 16, Ill., and 630 W. 51st St., New York 19, N. Y.

### Processing in a Small Way



Many growers would like to do some processing of their fruit in a limited way, but much of the equipment is large and costly. The newly designed Sweden Juicer may be what you have been looking for. Sturdily designed to meet all the specifications of the Federal Food, Drug, and Cosmetic Act, this little juicer does a remarkable job. If interested, write Sweden Freezer Manufacturing Co., 3401 17th Ave., West, Seattle 99, Wash.

SEPTEMBER, 1961

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## The Orchardist—Man of Destiny?

IS there some greater purpose behind the occupation of fruit growing than providing the essentials for twentieth century living? In his book, "Recovery of Culture," reviewed on page nine, Henry Bailey Stevens, a New Hampshire fruit grower and director of the University of New Hampshire Extension Service, brings evidence that orcharding is one of man's noblest pursuits and that the thrill of the bloom in the spring and the harvest in the fall is instinctive in all of us. Here is a book that will give you a new outlook, stimulate your thinking, and answer your deepest questions. Published by Harper & Brothers and priced at \$2.00, it can be ordered from AMERICAN FRUIT GROWER Book Department.—Ed.

## A PRICELESS HERITAGE

(Continued from page 9)

plants form a marvelous partnership with animal life. This relationship has reached its most intimate form in the food-bearing tree. Horticulturists have been working to make the world a garden. Tomorrow it may be that our spiritual partnership will be again complete with a properly developed plant-man ratio.

Man has learned to protect the apple from scab infection and must learn to protect the thought of future generations from war and evil. Man has discovered how to extract nitrogen from the air. Man need not depend on animal fertilizers as much as he has done in the past.

Liberty Hyde Bailey has said, "If it were possible for every person to own a tree and to care for it, the good results would be beyond expectation."

This is what Dr. Stevens sees. He sees the horticulturist, particularly the one who works with trees, as a man of rich heritage who is the custodian of a tradition of countless centuries that will eventually prevail and return man to a creature of peace and frugivorousness.

THE END

## AAS ISSUES REPORT

THE title, "1,515 Growers at Work" is the significant heading of the annual report of Appalachian Apple Service for 1950-51. This is more than a review, for Carroll Miller, Appalachian's energetic secretary, covers broad industry problems, makes a diagnosis, and recommends a prescription. Four main marketing problems are outlined, with the conclusion that the apple marketing cart is worn out and systematic remodeling and rebuilding are necessary.

A limited number of copies of the report are available while they last from Appalachian Apple Service, Martinsburg, W. Va.

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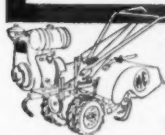
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## NAMES IN THE NEWS

• One of the largest individual apple growers in the U.S., with over 2,000 acres of orchard, M. E. Knouse of Peach Glen, Pa., who also is president of Knouse Foods Co-operative, Inc., was unanimously elected president of the International Apple Association at its August meeting.

• The Chicago Alumni Merit Award, given annually by the Iowa State College Alumni Association to an alumnus who has made an outstanding contribution to his chosen field, was recently awarded to Fred L. Overley, who received his M.S. in Horticulture at Iowa in 1916 and who in 1950 retired as horticulturist and superintendent of the Tree Fruit Experiment Station at Wenatchee, Wash. Overley is nationally noted for his work in orchard cost accounting and for the development of the "Culti-Cutter," a tool for cutting up cover crops, weeds, and small prunings in the orchard, thus providing a mulch for erosion control.

• Dr. James Hamilton, tree-fruit disease specialist at the New York Experiment Station, Geneva, was recently appointed head of the department of plant pathology at Geneva. . . . E. Gorton Linsley has been appointed to succeed Edward O. Essig as chairman of the division of entomology of the University of California, Berkeley. After 37 years on the staff of the university, Essig will devote full time to teaching and research.

• Roy Hoewisher of Paducah was one of the few growers who harvested a fair peach crop in Kentucky where peaches were practically nil this year due to cold winter injury. . . . In Rhode Island the orchard of Ellery Christianson was hit the hardest in the area by frosts and freezes but he nevertheless anticipates using his new cold storage to advantage for his small apple crop. . . . Thanks to hand pollination, the first such experiment reported in the Grand Valley of Colorado, Prescott Eames had a fine crop of Lambert and Tartarian cherries despite spring frosts and cold rains at bloomtime.

• Incorporated by cherry grower Roger Neal of Yakima, bean grower Edward E. Gerrick of Benton City, attorney Homer B. Splawn of Yakima, alfalfa seed grower Lloyd Bolhke of Roza, and farmer Robert Johansen of Roza, Sunshine Unlimited aims to combat the activities of groups causing untimely and damaging rains in the Yakima Valley of Washington.

• Three eminent specialists have retired from the Citrus Experiment Station at Riverside, Calif., after more than a quarter century of service on the staff of the University of California. Harry S. Smith, who was chairman of the division of biological control, is noted for his work in practically eliminating the dread mealybug in citrus plantings with the *Cryptolacmus* ladybird beetle. He recently has been directing Oriental fruit fly control work in Hawaii. A. J. Basinger, biological insect control specialist, is known for his work on the control of the European brown snail and the orange tortrix, major insect pests of oranges. Ira J. Condit, professor of subtropical horticulture, is author of the outstanding book, "The Fig," and in 1951 received the award of merit of the California Fig Institute and the emblem of honor of the California Avocado Society.

• Active in promoting the activities of the Vermont State Horticultural Society for 1951-52 are recently elected Ted Zaremba, Shoreham, president, and Ben H. Beck, Middlebury, vice president.



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SPRAYER—4 BEAN HIGH PRESSURE ORCHARD with 55 g.p.m. Royal pump, skid mounted with 500 gallon tanks. Power unit, centrifugal pump, Case orchard tractor on rubber. Hydraulic rider press \$525. 1-Cleaner No. 3, Andy Moe; 1-Apple Washer No. 3, Utter Moe. All in good condition and reasonably priced. TREKLER ORCHARD, Orville, Penna. on Route #309, about 8 miles north of Altoona.

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18 ACRES APPLE—ALL VARIETIES. PEAR, CHERRY and plum orchard, 4 miles northeast of Battle Creek, Michigan. on M-16. House, double garage, rider mill—20 barrels per day—storage, barn and sub-barn. Operated by owner 30 years. T. R. LEMMON, Route 5, Battle Creek, Michigan.

100 ACRES ORCHARD. 1 CRACK-WATERED 100-ACRE Michigan farm and modern home in heart of fruit belt. Owner will include tractor, farm implements, and orchard equipment! Blacking county road, electric line, 2 miles fishing stream, high school, city depot, 16 cultivation acres, 30 wooded, wife planted, 3,000 cherry trees, 400 apples, 100 peaches; good 8-room electric-lighted home, modern bath, furnace heat, hot water, electric pressure system plus running water indoors, good 30x50 basement barn, good poultry house, tool shed, garage; disabled owner prices at \$29,000 including details in new FREE FALL catalog, just off press, including farms in other states; UNITED FARM AGENCY, 220-43F South State St., Chicago 4, Illinois.

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## CALENDAR OF COMING MEETINGS AND EXHIBITS

Sept. 10-12—American Society for Horticultural Science annual meeting, University of Minnesota, St. Paul. President S. Howlett, Sec'y, Dept. of Hort., Ohio State University, Columbus 10.

Sept. 24-26—Texas Citrus & Vegetable Growers & Shippers convention, Dallas.—Austin E. Anson, Executive Manager, Morning Star Bldg., Harington, Tex.

Oct. 3-8—Florida Fruit and Vegetable Association annual convention, Sherry Frontenac Hotel, Miami Beach, Association headquarters: 29 South Court St., Orlando, Fla.

Oct. 8-12—National Safety Council 39th congress and exposition, West Palm Beach. General Sec'y, 428 N. Michigan Ave., Chicago 11, Ill.

Oct. 25-Nov. 3—National Apple Week. Display material available on request.—National Apple Week Assn., Inc., 154 East Ave., Rochester 4, N.Y.

Oct. 30-Nov. 1—Florida State Horticultural Society 64th annual meeting in conjunction with—Ernest Spencer, Sec'y, Bradenton.

Nov. 29-30—Oregon State Horticultural Society 64th annual meeting, Oregon State College, Corvallis.—C. O. Rawlings, Sec'y.

Dec. 2-5—New Jersey State Horticultural Society annual meeting, in conjunction with Vegetable Growers Association of America annual convention, Atlantic City.—Arthur J. Farley, Sec'y, Hort. Society, New Brunswick.

Dec. 4-5—Kansas State Horticultural Society annual meeting, Manhattan.—H. L. Drake, Sec'y, Bethel.

Dec. 6-7—Connecticut Pomological Society annual meeting, Bond Hotel, Hartford.—S. F. Hollister, Sec'y, Storrs.

Dec. 11-13—Illinois State Horticultural Society 96th annual meeting in conjunction with annual meeting Illinois Fruit Council, Broadview Hotel, East St. Louis.—H. B. Hartline, Sec'y, Carbondale.

### 1952 Meetings

Jan. 4-6—United Fruit and Vegetable Association annual convention, Hotel Cleveland, Cleveland, Ohio.—R. A. Seelig, 2017 S Street, N.W., Washington 9, D. C.

Jan. 7-9—American Pomological Society annual meeting in joint session with Virginia State Horticultural Society 16th annual meeting, Hotel Roanoke, Roanoke.—W. D. Armstrong, Sec'y, APS, Lexington, Ky.; John F. Watson, Sec'y, Va. Society, Roanoke, Va.

Jan. 15-17—New York State Horticultural Society 97th annual meeting, Rochester.—D. M. Dairympie, Sec'y, Lockport.

Jan. 16-18—Indiana Horticultural Society annual meeting, Murat Temple, Indianapolis.—Ray Klackie, Sec'y, West La Fayette.

Jan. 22-24—New York State Horticultural Society eastern meeting, Kingston.—D. M. Dairympie, Sec'y, Lockport.

Jan. 29-31—New Hampshire Horticultural Society 55th annual meeting in conjunction with annual Trade Show, Putnam Hall, University of New Hampshire, Durham.—Daniel R. Batchelder, Sec'y, Wilton.

Feb. 20-22—Ohio State Horticultural Society 105th annual meeting, Cleveland Hotel, Cleveland.—C. W. Ellenwood, Sec'y, Wooster.

AMERICAN FRUIT GROWER

# THE ORCHARD HOME

*Homekeeping hearts are the happiest.  
—Longfellow*

Why not try this apple-dessert recipe, from Mrs. Lindell Caldwell, Griggsville, Ill.

## GREEN APPLE UPSIDE-DOWN CAKE

- 1 cup brown sugar
- ½ teaspoon cinnamon
- ¼ teaspoon nutmeg
- 5 tablespoons butter or margarine
- 3 large, tart green apples
- Maraschino cherries

Combine brown sugar, cinnamon, and nutmeg, and mix well. Put in a 10-inch skillet; add butter and melt over low heat until all is well blended. Stir occasionally. Peel, core, and cut each apple into three rings. Arrange rings immediately in the sirup, turning to coat both sides. Put a cherry in the center of each ring. Cover with the following cake batter:

- ½ cup butter or margarine
- ½ cup sugar
- 2 egg yolks
- 1½ cups sifted flour
- 3 teaspoons baking powder
- ½ teaspoon salt
- ¼ cup fresh or canned unsweetened orange juice, or
- ¼ cup milk and ½ teaspoon vanilla, combined
- 2 egg whites

Cream together the butter and sugar. Add beaten egg yolks, mixing well. Sift together the dry ingredients and add to creamed mixture alternately with the liquid, beating thoroughly after last addition. Fold in the stiffly beaten egg whites. Pour over fruit-sirup mixture. Bake in a moderately hot oven (375° F.) 35 minutes. Remove from oven and allow to stand 3 minutes. Turn upside down on a large plate, so fruit and sirup will be on top. Serves 8.

Why not serve this dessert recipe from Mrs. C. W. Hyde, Indianapolis, Ind.

## BERRY WHIP

- 1 quart red or black raspberries, crushed well
- Add 1 cup sugar to berries
- 3 egg whites, beaten stiff

Combine, serve cold in sherbet dishes, and garnish with a few whole berries; or add 1 cup of whipped cream to the above ingredients and freeze.

Have you ever been perplexed as to what to do with fallen apples? This experience story by Mrs. Blanche Campbell of Las Vegas, Nev., will give you some ideas.

## TAKING CARE OF WIND-FALLEN APPLES

There is no excuse for letting wind-fallen apples go to waste. Fallen apples do not keep well in storage, but I find they make excellent applesauce, apple-butter, and other delicious dishes.

When more apples fall at one time than I am able to use, I can the surplus as they make mighty good eating when the snow flies. I have ready the required number of sterilized jars. I wash, peel, and quarter the apples in the usual manner; barely cover them with water; and cook until done. Then I sweeten them to taste, can boiling hot, and seal immediately.

The peelings I use for jelly. First of all, I cut out all blemishes, cover the peelings with water, and simmer gently until they are cooked. I then turn them into a cheesecloth jelly bag and drain until all liquid is obtained, measure the juice, and make the jelly according to my regular recipe.

Last, but not least, I like to dry some of the apples. First, I peel, core, and quarter them, cutting the larger ones into eighths for even drying. I spread them out each day on a clean cloth in the sunshine, bringing them in each night to keep off the dew. When the apples are thoroughly dry, they will rattle when placed together and have a shriveled appearance. I store them in a cool place in a muslin bag or flour sack away from insects.

This garnish suggestion from Mrs. William D. Lawe, Kingman, Ariz., will make a hit on Christmas.

## CHRISTMAS PEARS

When canning pears, add a little red coloring and cinnamon or cinnamon candies. Boil until the proper color of red is obtained, fill jars, and can. Do the same with green coloring and add mint or peppermint flavoring, cook until the pears are a pretty green. Use for a garnish around roasts or turkey, and you will receive many compliments!

Here is an experience story containing suggestions for pears, sent in by Miss Roberta Allen, Hollywood 28, Calif.

## WHEN YOU PARE A PEAR

—sprinkle it with lemon or pineapple juice to keep it from turning brown!

For most of the year you'll use pears in salads and sauce, to can and preserve, to pickle and spice, to dry, to put in a lunch box, or to bake.

For baking pears, I never peel, core, or remove the stems. I place the pears close together in a pan with a small amount of water, and when nearly tender I slit each one near the stem and I put some sugar in the slit. Then I fringe the slit with whole cloves, sprinkle sugar over the pears, and return to the oven to finish baking. They are delicious; hot or cold, with or without cream!

Pears put up whole in tall glass jars are always admired at fairs. I avoid using over-soft fruit for canning and I leave on the stems.

Often I serve pear salad as everyone likes it. It's easy and there are so many variations. I cover a plate of greens with pear halves, then top each half with any one of the following suggestions, using my favorite dressing: 1) watercress and cheese strips; 2) cream cheese and pimentos; 3) very stiff whipped cream and unblanched almonds.

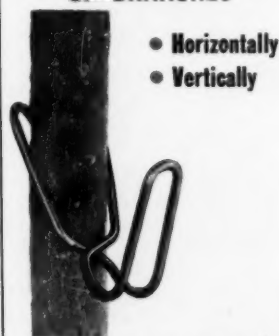
**Do you have a good experience story on growing fruit, a poem, or fruit recipes suitable for Thanksgiving or Christmas? If so, why not send them to the Orchard Home Editor, AMERICAN FRUIT GROWER, 106 Euclid Avenue, Willoughby, Ohio. All contributions to be considered must be in our hands five weeks before date of issue.**

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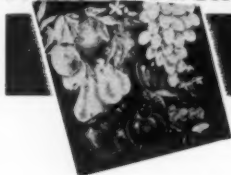
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America's Only "NATIONAL FRUIT MAGAZINE"

### "Pricing" Is a Job for Experts

SETTING the price at which an article will move at a profit is no longer a job for the amateur. There was a time when one man had something to sell and another man had something to buy. The forces were as simple as that. All the facts were in the hands and minds of the two bargainers, and they met on the platform of supply and demand and acted.

But pricing is no longer simple. There are millions of producers and millions of buyers. There are not only a few commodities for sale, but thousands. Bananas affect the price of apples and oranges, and so does a government tax program and a Korean incident. The desire for a summer vacation may be stronger than the desire for a television set or a deep freezer. When sugar is higher per pound than the raw fruit, less fruit is processed. The multiplicity of factors that go into making a price are more than most people realize.

Further, a single sale of peaches is no longer enough. The profit for the season depends on the last sale as well as the first and all the intervening ones. If the crop does not move out and clean up satisfactorily, it is a poor season. Not only that, it affects the new crop as well as competing crops.

The best sale is no longer the one-sided one that takes advantage of someone. It is the sale that makes everybody happy. Little by little, facts are being brought together that are helping to make a little sense in pricing. Growers know from experience that when they sell to dealers at too high a price one year, the loss is made up the next. A full crop following a light one is likely to see the full one start too high, move slowly, and end disastrously. On the other hand, a short crop following a big crop usually starts too low and ends too high. We ought to profit by some of this knowledge.

Growers need to know as many facts as can be gathered together for

them. There needs to be argument and discussion and reason around the table of fruits, just as there now is when the price of a new model automobile or a dishwasher is made. We are on the way. We should encourage the program at every step and in every way at our command.

### A Message for Growers

IF YOU haven't read Gayelord Hauser's book on diet, by all means get a copy. If you cannot get a copy in your local bookstore, write AMERICAN FRUIT GROWER. There is a tremendous message for fruit growers in this best seller, just as there is for all who seek to gain or preserve their health, strength, and vitality.

The author urges his readers to eat more fruit and supplies plenty of proof that fruit contributes immeasurably to good health. *Look Younger, Live Longer* is now in its 16th edition. More than 350,000 copies have been sold. Every one who reads this book becomes fruit conscious and is definitely buying more fruit. It will be good business for all of us to increase the number of readers of this stimulating book.

### Fruit Production at a Glance

	1940-49	1950	USDA Aug. 1, Est. 1951
	Thousand Bushels		
Apples	109,033	123,126	121,338
Eastern	46,016	57,118	59,778
Central	19,082	17,947	24,071
Western	43,926	48,061	37,489
Peaches	71,150	53,485	67,772
Cling., Calif.	19,010	19,888	21,585
Free., Calif.	11,159	10,000	10,793
Pears	31,008	31,140	31,097
	Tons		
Apricots	228,120	215,100	176,300
Cherries	185,814	241,730	232,210
Sweet	90,954	81,880	73,210
Sour	94,860	159,850	159,000
Plums	82,530	82,500	102,000
Prunes, (dry) Calif.	187,200	149,000	181,000
Grapes	2,797,000	2,707,400	3,244,600

### Fruit Talk

SOME IDEA of the development of prepackaging is told by figures released by one of the **Giant Chain Stores**. In 1947 they prepackaged 12,536 cars of perishable products, including 26 different items. In 1950 the figures were 18,921 cars and 48 items. The feeling is that prepackaging should be done as close to the scene of production as possible. More often than not this is not possible and must be done either near the consumer or along the way.

It is hard to realize that the crop of cider apples in **France** is larger than the entire apple crop of the **United States**—192 million bushels in 1950. Europe produced 554 million bushels of apples in 1950, of which 201 million were cider apples. Total world production was near 642 million bushels.

**Great Bay**, a large, late strawberry from the breeding program of the **University of New Hampshire**, is reported favorably from a number of places. **Red Crop**, from **New Jersey**, is making steady progress as a freezing berry.

The housewife is the boss. She wouldn't touch red pitted cherries a year ago at 27 cents a can but she grabbed them at "2 for 47."

Apple production, according to **G. P. Scoville** in **Cornell's "Farm Economics,"** is seven times as variable as milk production per cow, and apple prices are about four times as variable as milk prices. Yet in the long run profits are not likely to be greatly different—just that fruit farming is many times more speculative than dairy farming. Continuing, "A farmer has greater control over the production of milk than over the production of apples. If a cow dies, he can buy another. If a bearing tree is blown over, it will be some time before another tree of full bearing age occupies the space. The farmer builds a barn to protect his cows but the best he can do for his apple trees is to plant them where the air drainage is good, avoid frost pockets, and, if possible, obtain the protection of a large body of water. The cows have the roughages grown on the farm and stored in the silo and mow and the run of the pasture as well as the grain shipped from the West. The best that the farmer can do for his apple trees is to set them in a deep soil so that the roots can reach down for water and food, a soil sufficiently drained so that during excessive rains the trees will not be suffocated by standing water."

**J. C. McDaniel** of **Illinois** says that the winter of 1950-51 has accentuated the effect of site, culture, and pest protection in increasing or reducing peach tree hardiness. He suggests better selection of site and soil, balanced fertilizers, more cover crops and less clean cultivation, and postponement of pruning until late in the season.

—H.B.T.

### Coming Next Month

- Variety Trends and Shifts
- The New French Hybrid Grapes
- Overcoming the Problem of Misnamed Nursery Stock
- Buy Virus-Free Trees

AMERICAN FRUIT GROWER

# THE DODGE "Job-Rated" PICK-UP is the FARMERS' CHOICE

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